

AMENDMENTS TO THE SPECIFICATION:

Please substitute the following amended paragraphs for the pending paragraphs beginning on page 20, line 27, through page 21, line 13:

Fig. 5 illustrates a flow chart, which describes the operation of the system illustrated in Fig. 4. In Fig. 5, problem P and initial configuration parameters C, received from solver model ~~code~~ 590, are sent to step 530, which sends the problem P and the parameters C to step 550 within solving module ~~code~~ 520. For the purpose of illustration, parameters C may specify, among other decision points, how many individual search steps the search method in solver iteration step 550 should execute. The complexity-directed fine-grained, interleaved algorithm synthesis module code of the problem solver resides within solver iteration step 550, but for clarity is not shown. Other types of parameters and heuristics C are possible, as will be appreciated by one skilled in the art. At step 550 the solver ~~code~~ attempts to solve the problem P. In this step, the solver code typically searches part of the search space, by using, for example, a gradient-descent, Nelder-Mead, interior-point, depth-first search, or any other technique that is intended to lead the solver towards promising regions of the search space, those regions where optimal valid solutions may be found. Step 550 depends on the type of solver or solvers used, as would be appreciated by one skilled in the art.